

Work Order ID 127670

127670

Page 1

December-17-14 1:49:27 PM

Item ID: D3552-23 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Door Prop
 Start Date: 12/17/14 Start Qty: 12.00 *12* Cust Item ID:
 Required Date: 12/17/14 Req'd Qty: 12.00 *12* Customer:
 Reference:

Approvals: Process Plan: MCS Date: 14-12-23 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3552	K								
100	PURCHASING	0.00							
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>26941</u>								
	Purchase Part Number: B6-190-475-070N								
	Supplier: LS Technologies								
	Certificate of conformity is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.00							
Packaging	Ensure certificate of conformity is attached								
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control	Test for correct pressure								

C2 15/01/06 12

12x 8015-019

(12) DAG 38 9-89
 JAN 21 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Work Order ID 127670

127670

December-17-14 1:49:27 PM

Page 2

Item ID: D3552-23 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Door Prop
 Start Date: 12/17/14 Start Qty: 12.00 *12* Cust Item ID:
 Required Date: 12/17/14 Req'd Qty: 12.00 *12* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>ST365</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

MUS 15-01-23
 118-1-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other _____ _____ _____
--	--	--

December-17-14 1:49:27 PM

127670

D3552-23

Required Date: 12/17/14

Required Qty: 12.00

Comments: IPP Rev:A 11.04.07 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
B6-190-475-070N		Purchased	No				Each	0.0000		12			
B6-190-475-070N									**	12 x 8015-019			
Door Prop													

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

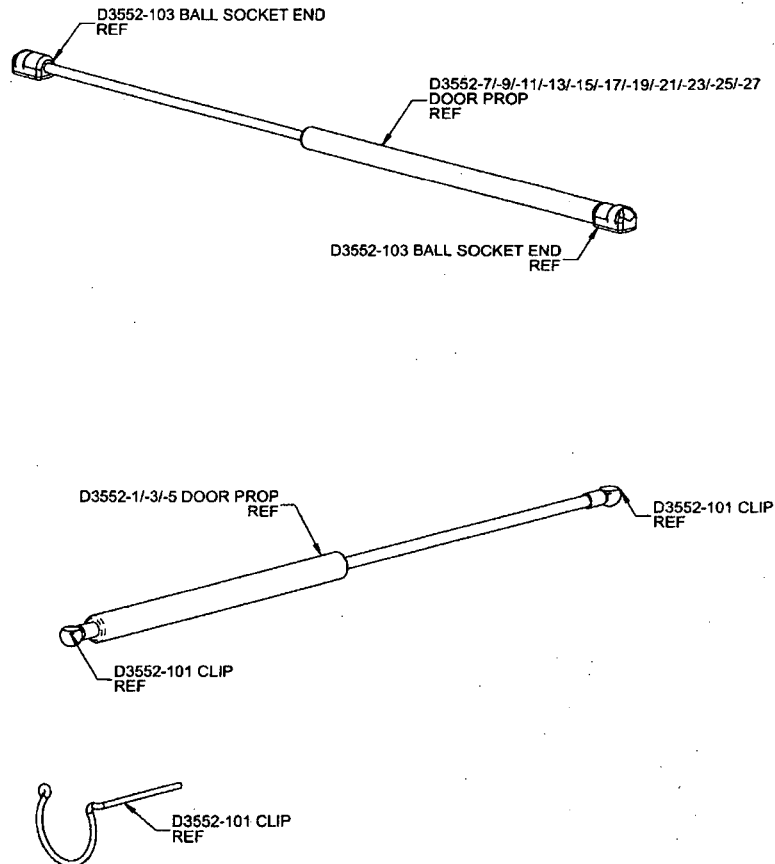
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread	☐ Pressure/Forced
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set	☐ Set-up
☐ Turning Sequence	☐ Finish	☐ Out of Calibration	☐ Temperature/Cure
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence	☐ Weld
			☐ Wrong Stock Pulled
			☐ Other

SPECIFICATION CONTROL DRAWING



UNCLASSIFIED COPY
SUPPLEMENT
WITH NOTICE
NO. 127670-MLJ
14-12-23

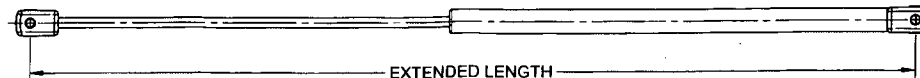
RELEASED
2012-07-24

K	ADD "X" TO LS TECHNOLOGIES P/Ns TO DESIGNATE "EXTRA DAMPING" FOR D3552-15/-17/-19/-25/-27. REASON: PART 2-209.	MB	12.07.16
J	ADD P/N D3552-25/-27. REMOVE ALTERNATE PART NUMBER FOR -15, -17 AND -18. STROKE FOR -15, -17 AND -18 WAS 1308.06 NOW 1548.06. EXTENDED LENGTH FOR -15, -17 AND -19 WAS 386/15.2 NOW 387/15.2.	AP	11.12.07
I	ADD P/N D3552-23	RF	11.10.11
H	ADD P/N D3552-21	DC	11.03.10
G	FOR -15, FORCE:300/87.4 WAS 400/89.8, SUPPLIER P/N B8-154-387-300N WAS B8-154-387-400N; FOR -17, STROKE: 1308.47 WAS 1508.30, EXT LG: 386/15.2 WAS 407/16.0, SUPPLIER P/N B8-154-387-156N WAS B8-167-408-156N	JPH	10.11.01
F	ADD P/N D3552-15/-17/-19 AND ALTERNATE SUPPLIER	JPH	10.07.27
E	ADD P/N D3552-13 ZN B8-1, A8-1, D6-1, CHANGE NAME FROM "GAS SPRING" TO "DOOR PROP" THROUGH OUT DWG	HS	10.02.03
D	ADD P/N D3552-101 ZN D6-1, C7-1, C1-1 AND D3552-103 ZN D1-1 AND C2-1 AND ZN B8-1; ADD NOTE REGARDING D3552-101 AND D3552-103 COMPATIBILITY ZN A8-1	HS	09.04.02
C	ADD D3552-11 AND CONVERSIONS FOR INSPECTION; UPDATE P/N FOR D3552-7	LE	07.08.01
B	ADD D3552-7/-8; UPDATE DESC. D3552-1A-3/-5	LE	06.10.24
A	NEW ISSUE	LE	06.09.15
REV.	DESCRIPTION	BY	DATE
DESIGN	4E		
DRAWN	MD		
CHECKED	MD		
MFG. APPR.	MD		
APPROVED	MD		
DE APPR.	MD		
DATE	12.07.16		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3552** REV. K
TITLE **DOOR PROP** SCALE NTS
SHEET 1 OF 2

COPYRIGHT © 2006 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE LOANED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DART PART NUMBER	DESCRIPTION	STROKE (mm/in)	EXTENDED LENGTH (mm/in)	FORCE (N/lb)	END FITTING	MATERIAL	SUPPLIER	SUPPLIER PART NUMBER OR MODEL NUMBER
D3552-1	DOOR PROP	220/8.66	530/20.6	70/15.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-220-530-070N
D3552-3	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-200-490-200N
D3552-5	DOOR PROP	175/6.89	430/16.9	150/33.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-175-430-150N
D3552-7	DOOR PROP	220/8.66	530/20.9	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-220-530-070N
D3552-9	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-200-490-200N
D3552-11	DOOR PROP	240/9.45	575/22.6	150/33.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-240-575-150N
D3552-13	DOOR PROP	220/8.66	530/20.9	140/31.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-220-530-140N
D3552-15	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-300NX
D3552-17	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-156NX
D3552-19	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	60/13.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-060NX
D3552-21	DOOR PROP	167/6.57	410/16.1	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-167-410-070N
D3552-23	DOOR PROP	190/7.48	475/18.7	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-190-475-070N
D3552-25	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-300NX
D3552-27	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-156NX
2 D3552-101	CLIP	N/A	N/A	N/A	N/A	CARBON STEEL	LS TECHNOLOGIES	C9
3 D3552-103	BALL SOCKET END	N/A	N/A	N/A	N/A	NYLON	LS TECHNOLOGIES	B10

D3552-X DOOR PROP

RELEASED
2012-07-24

NOTES:

- 1) IDENTIFICATION: IDENTIFY PER QSI 044 6.2
- 2) D3552-101 CLIP IS ONLY COMPATIBLE WITH D3552-1/-3/-5 DOOR PROPS
- 3) D3552-103 BALL SOCKET END IS ONLY COMPATIBLE WITH D3552-7/-9/-11/-13/-15/-17/-19/-21/-23/-25/-27 DOOR PROPS

DESIGN	DE	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	NS	DRAWING NO.	REV. K
MFG. APPR.		D3552	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		DOOR PROP	NTS
DATE	12.07.16	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO26941

Purchase Order Date 1/6/2015

PO Print Date 1/6/2015

Page Number 1 of 2

Order From :

VC-LST0001

Ship To : DART AEROSPACE LTD

LS TECHNOLOGIES INC.
314 JESSOP AVE
SASKATOON, SK S7N 1Y6
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PO 26941

Contact Name

Vendor Phone

306 683 5000

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Terms

Net 30

Ship To Phone

Currency

CAD

Ship Via:

FedEx Overnight collect

FOB

EXW - (Ex Works)

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extend Pri
1	B8-154-387-060NX AS PER DWG D3552 REV. K B127455	Gas Spring	1/9/2015 Yes 1/9/2015		6.00 Each	\$26.50	\$159.
						Line Total:	\$159.
2	B6-190-475-070N AS PER DWG D3552 REV. K B127670	Door Prop	1/9/2015 Yes 1/9/2015		12.00 ✓ Each	\$32.50	\$390.
						Line Total:	\$390.
3	SSA4/6-122-315-310N AS PER DWG D3969 REV. C B127532	Gas Spring	1/9/2015 Yes 1/9/2015		10.00 Each	\$65.00	\$650.

PO Instructions: Fedex Acc#151793240

Note:

1/6/2015

LS Technologies Inc
314 Jessop Ave
Saskatoon, SK S7N 1Y6

Ph: 306-683-5000 Fax: 306-683-6403

Packing Slip

P.O. No.	Date	Invoice #
26941	1/07/2015	12141

Bill to:
Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7

Ship to:
Main Finished Goods Location Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7

Ship	Via	FOB
	Fed-Ex	

Qty	Description
6	D3552-19 B127455 Gas Spring ✓
12	D3552-23 B127670 Gas Spring ✓ <i>SP15-01-9</i>
10	D3969-1 B127532 Stainless Gas Spring (SSA4/6-122-315-310N) LABEL WITH PERMANT INK MARKER ONLY - NO LABELS ✓

Order checked by : *NF*



LS Technologies Inc
314 Jessop Ave
Saskatoon, SK, S7N 1Y6
Ph: (306) 683-5000 Fax: (306) 683-6403

Certificate of Compliance

Jan 07, 2015

This is to certify that the parts listed below meets specifications as required by your order.

6 Units : D3552-19 B127455 Gas Spring

12 Units : D3552-23 B127670 Gas Spring

10 Units : D3969-1 B127532 Gas Spring

Country of Manufacture: Canada

Date of Manufacture : Dec 2014

This product is ROHS compliant.

Purchase Order # 26941

Invoice # 12143

L S Technologies Inc Canada

A handwritten signature in black ink, appearing to be 'Nolan Fehr', written over a horizontal line.

Nolan Fehr
Manager